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OM nucleic - nucleic search, using sw model

Run on: March 9, 2002, 01:07:04 ; Search time 755.06 Seconds  
(without alignments)  
28.386 Million cell updates/sec

Title: US-09-851-670-19

Perfect score: 25

Sequence: 1 gctgactgtgcatccctcttgc 25

Scoring table:

IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 930621 seqs, 428662619 residues

Total number of hits satisfying chosen parameters: 1026190

Minimum DB seq length: 0  
Maximum DB seq length: 60

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

N.Geneseq\_1101:\*

1: /SIDS2/gcgdata/geneseq/NA1980.DAT:\*  
2: /SIDS2/gcgdata/geneseq/NA1981.DAT:\*  
3: /SIDS2/gcgdata/geneseq/NA1982.DAT:\*  
4: /SIDS2/gcgdata/geneseq/NA1983.DAT:\*  
5: /SIDS2/gcgdata/geneseq/NA1984.DAT:\*  
6: /SIDS2/gcgdata/geneseq/NA1985.DAT:\*  
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8: /SIDS2/gcgdata/geneseq/NA1987.DAT:\*  
9: /SIDS2/gcgdata/geneseq/NA1988.DAT:\*  
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13: /SIDS2/gcgdata/geneseq/NA1992.DAT:\*  
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20: /SIDS2/gcgdata/geneseq/NA1999.DAT:\*  
21: /SIDS2/gcgdata/geneseq/NA2000.DAT:\*  
22: /SIDS2/gcgdata/geneseq/NA2001.DAT:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	15	60.0	60	20	AA15696
2	14.6	58.4	22	22	AA15696
3	14.6	58.4	22	22	AA15696
4	14.4	57.6	33	21	AA258165
5	14.2	56.8	30	16	AA075842
6	14.2	56.8	47	21	AA269514
7	14	56.0	23	18	AA189102
8	14	56.0	30	14	AA038554
9	14	56.0	30	20	AA102255
10	14	56.0	31	21	AA296703
11	14	56.0	40	22	AA127353

12	13.8	55.2	47	16	AA075515	Human hepatitis B
13	13.8	55.2	60	21	AA191904	PCR primer #2 for
14	13.4	53.6	24	21	AA27817	North American PRR
15	13.4	53.6	30	21	AA37454	Arabidopsis acyltr
16	13.4	53.6	32	19	AA19367	primer AB152 for T
17	13.2	52.8	34	20	AA21385	Recombinant HIV-1
18	13.2	52.8	30	13	AA25333	5' PCR primer for
19	13.2	52.8	34	21	AA229698	Domain 1, 2 PCR(12
20	13.2	52.8	36	17	AA110347	CAEV env gene TM f
21	13.2	52.8	37	17	AA187335	Rat hepatocyte car
22	13	52.0	26	21	AA081602	Pan-fungal rRNA/rD
23	13	52.0	26	22	AA088473	Helper oligonucleot
24	13	52.0	26	22	AA083425	Methoxy helper oli
25	13	52.0	26	22	AA083602	Pan-fungal helper
26	13	52.0	27	21	AA062797	Endoglucanase prim
27	13	52.0	30	17	AA127103	Yeast calcineurin-
28	13	52.0	40	16	AA080091	ADPcp large subun
29	13	52.0	40	16	AA085020	Primer for ADP-9lu
30	13	52.0	43	22	AA013157	Human membrane-tyr
31	13	52.0	43	22	AA013159	Human membrane-tyr
32	13	52.0	46	20	AA03233	PCR primer used to
33	13	52.0	50	22	AA003101	1467-13 oligonucle
34	13	52.0	60	22	AA085484	Nucleotide sequenc
35	13	52.0	60	22	AA085488	PCR primer used to
36	12.8	51.2	20	20	AA096544	PCR primer used to
37	12.8	51.2	27	18	AA086066	P. funiculosum his
38	12.8	51.2	30	22	AA002148	Selex procedure gr
39	12.8	51.2	36	20	AA078174	Selex procedure gr
40	12.8	51.2	37	20	AA078175	Polynucleotide seq
41	12.8	51.2	40	21	AA095762	Seamless forest vir
42	12.8	51.2	41	17	AA005803	Human transferrin
43	12.8	51.2	44	17	AA005804	Human map-related
44	12.8	51.2	47	21	AA068780	Mouse flk-1 VEGF r
45	12.8	51.2	54	18	AA073390	

#### ALIGNMENTS

RESULT 1	
AA15696	AA15696 standard; DNA: 60 BP.
XX	
XX	AA15696;
AC	
XX	
DT	07-MAY-1999 (first entry)
XX	
DE	PCR primer used to amplify a protein phosphatase gene.
XX	
KW	Protein phosphatase gene; growth; fermentation activity;
KW	dough production; yeast; PCR primer; ss.
XX	
OS	Synthetic.
OS	Saccharomyces cerevisiae.
XX	
PN	JPL1042090-A.
XX	
PD	16-FEB-1999.
XX	
PF	29-JUL-1997; 97JP-0203652.
XX	
PR	29-JUL-1997; 97JP-0203652.
XX	
PA	(KANF ) KANEKA CORP.
PA	(SHOS ) SHOWA SANGYO CO.
XX	
DR	WPI: 1999-197822/17.
XX	
PT	New yeast of controlled activation at low temperatures - useful for
PT	improving the quality of dough
XX	
PS	Example 1; Page 10; 41pp; Japanese.
XX	



OS Homo sapiens.  
 XX  
 PI MO200002902-A1.  
 XX  
 PD 20-JAN-2000.  
 XX  
 PF 12-JUL-1999; 99WO-US15772.  
 XX  
 PR 13-JUL-1998; 98US-0092647.  
 XX  
 PA (GILL/) GILL P S.  
 XX  
 PI Gill PS:  
 XX  
 DR WPI; 2000-171128/15.  
 XX  
 PT Saposin B derived peptides, useful as inhibitors of angiogenesis and  
 XX tumor growth -  
 XX  
 PS Example 1; Page 47; 78pp: English.  
 CC The present sequence is that of a 5' primer used in the PCR  
 CC amplification of human saposin A cDNA using T1 fibroblast cell cDNA  
 CC as template. The primer pair (see also AA258166) was designed to  
 CC introduce a 5' XbaI site and a 3' XhoI site into the amplified  
 CC cDNA. The PCR product was cloned into bacterial and eukaryotic  
 CC expression vectors, for use in studies designed to determine  
 CC whether recombinant saposin B (see AA158716) has antiangiogenic  
 CC activity. The invention is based on the discovery of the  
 CC antiangiogenic activity of saposin B. Small polypeptides (see  
 CC AA158684-715) based on saposin B can be used for the treatment of  
 CC undesired angiogenesis and tumour growth, especially for the  
 CC treatment of Kaposi's sarcoma.  
 XX  
 SQ Sequence 33 BP; 8 A; 12 C; 4 G; 9 T; 0 other:  
 XX  
 Query Match 57.6%; Score 14.4; DB 21; Length 33;  
 Best Local Similarity 75.0%; Pred. No. 1.1e+03;  
 Matches 18; Conservative 0; Mismatches 6; Indels 0; Gaps 0;  
 QY 2 ctgacatgtgacccctcttgc 25  
 || ||||| ||||| |||  
 Db 1 ctgacatgtagaacctcttccgc 24  
 XX  
 RESULT 5  
 AA075842  
 ID AA075842 standard; DNA; 30 BP.  
 XX  
 AC AA075842;  
 XX  
 DT 18-AUG-1995 (first entry)  
 XX  
 DE Sense primer to amplify Non-A Non-B hepatitis virus for analysis.  
 XX  
 KW Non-A Non-B hepatitis virus: structural region; cDNA to genomic RNA;  
 KW detection; reagent; anti-Non-A Non-B hepatitis virus antibody;  
 KW vaccine; antigen; epitope; diagnosis; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN EP628572-A.  
 XX  
 PD 14-DEC-1994.  
 XX  
 PF 27-MAY-1994; 94EP-0108256.  
 XX  
 PR 28-MAY-1993; 93JP-0126709.  
 PR 02-MAR-1994; 94JP-0032201.  
 XX  
 PA (ARIM/) ARIMA T.  
 PA (EISA) EISAI CO LTD.

XX  
 PI Aoyama M, Arima T, Hosoda T, Iwasaki Y, Obara T;  
 PI Sawada T, Rohmatsu J;  
 XX  
 DR WPI; 1995-015655/03.  
 XX  
 PF New non-A non-B hepatitis virus sub-type - used to develop prods.  
 PT for detection, diagnosis, prevention and treatment of non-A non-B  
 PT hepatitis.  
 XX  
 PS Example 2; Page 54; 59pp: English.  
 XX  
 CC This primer is based on nucleotides 6768-6787 of the Non-A Non-B  
 CC hepatitis virus strain HC-J8 genome encoding the non-structural protein.  
 CC It is used in conjunction with AA075843 to amplify nucleotides 2706-2496  
 CC of AA073818. The nucleotide sequences (see also AA073817-19) were  
 CC isolated from the plasma of donors in Japan with high s-GTP levels, and  
 CC were found to be different from previously reported hepatitis  
 CC viruses. The DNA can be used as a reagent for detecting the NANB  
 CC hepatitis viral gene. The polypeptides can be used as reagents for  
 CC detecting anti-NANB hepatitis antibodies or as a NANB hepatitis viral  
 CC vaccine.  
 XX  
 SQ Sequence 30 BP; 4 A; 7 C; 10 G; 9 T; 0 other:  
 XX  
 Query Match 56.8%; Score 14.2; DB 16; Length 30;  
 Best Local Similarity 84.2%; Pred. No. 1.3e+03;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 5 gatctgtagccctctt 23  
 || || ||||| ||||| |||  
 Db 1 gacctcgtagccctctt 19  
 XX  
 RESULT 6  
 AA269514/C  
 ID AA269514 standard; DNA; 47 BP.  
 XX  
 AC AA269514;  
 XX  
 DT 10-SEP-2001 (first entry)  
 XX  
 DE Human map-related diallelic marker SEQ ID NO:3870.  
 XX  
 KW Human genome; diallelic marker; high density disequilibrium map;  
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
 KW haplotyping; hybridisation; identification; characterisation;  
 KW diagnosis; single nucleotide polymorphism; SNP; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key  
 FT variation  
 FT Location/Qualifiers  
 FT replace(24,C)  
 FT /tag= a  
 FT /standard\_name= "single nucleotide polymorphism"  
 XX  
 PN MO9954500-A2.  
 XX  
 PD 28-OCT-1999.  
 XX  
 PF 21-APR-1999; 99WO-IB00822.  
 XX  
 PR 21-APR-1998; 98US-0082614.  
 PR 23-NOV-1998; 98US-0109732.  
 XX  
 PA (GEST) GENSET.  
 XX  
 PI Cohen D, Blumenfeld M, Chumakov I;  
 PI WPI; 2000-013267/01.  
 XX  
 DR Novel diallelic markers used to construct a high density disequilibrium

PT map of the human genome -  
XX  
XX Claim 3; Page 1056; 2745pp; English.  
CC Aa26554 to Aa269578 represent human diallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. Aa269579 to Aa27440 represent amplification  
CC primers for the diallelic markers. The diallelic markers of the  
CC invention have a variety of uses: they can be used for high density  
CC mapping of the human genome, and in complex association studies and  
CC haplotyping studies which are useful in determining the genetic basis  
CC for disease states. Compositions and methods of the invention can also  
CC be useful for the identification of the targets for the development of  
CC pharmaceutical agents and diagnostic methods, as well as the  
CC characterisation of the differential efficacious responses to and side  
CC effects from pharmaceutical agents acting on a disease as well as other  
CC treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297  
CC and 3367, are not actually given a sequence in the Sequence Listing  
CC from the present invention.  
XX  
XX  
SQ Sequence 47 BP; 16 A; 9 C; 10 G; 12 T; 0 other;  
  
Query Match                    56.8%; Score 14.2; DB 21; Length 47;  
Best Local Similarity       84.2%; Pred. No. 1.4e+03;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
OY 5 gatctgcatcctctctt 23  
      ||||| | | | | | | |  
DB 23 GATCTCGAGCGCATTTCTT 5  
  
RESULT 7  
AAT89102 standard; DNA: 23 BP.  
XX  
XX AAT89102;  
AC  
XX 30-MAR-1998 (first entry)  
XX  
XX E. coli serotype 0157:H7 diagnostic fragment detecting PCR primer 5.  
XX  
XX Random amplified polymorphic DNA primer; RAPD primer;  
XX microbe identification; microbe detection; PCR primer; ss.  
XX  
XX Synthetic.  
XX Escherichia coli.  
XX  
XX W09732043-A1.  
XX  
XX 04-SEP-1997.  
XX  
XX 24-FEB-1997; 97WO-US02831.  
XX  
XX 29-FEB-1996; 96US-0608881.  
XX  
XX (DUPO ) DU PONT DE NEMOURS & CO E I.  
XX Jensen MA;  
XX  
XX WPI; 1997-448703/41.  
XX  
XX Identification of E. coli serotype 0157:H7 by detection of specific  
XX DNA sequences - used for analysis of foods, clinical samples,  
XX medical products etc.  
XX  
XX Claim 7; Page 17; 44pp; English.  
XX  
XX PCR primers AAT89098-104 are primers that have been identified as being  
XX the most specific for the identification of Escherichia coli serotype  
XX 0157:H7. They are derived from a highly specific diagnostic 1047 bp  
XX fragment (AAT89095), as well as its complementary strand. AAT89098,

CC AAT89100, AAT89102, and AAT89104 are derived from AAT89095, while the  
CC rest of the primers are derived from its complementary sequence. A number  
CC of these primers, when used singly or in combination, resulted in several  
CC other diagnostic PCR fragments (AAT89105-08) being identified. An  
CC unknown microorganism is identified as a member of the E. coli 0157:H7  
CC serotype if analysis of its genomic DNA indicates the presence of the  
CC characteristic 1047 bp sequence or a diagnostic marker fragment of this  
CC sequence. The method is used to detect cells of the 0147:H7 serotype in  
CC foods, human or animal body fluids or tissues, environmental samples,  
CC medical products and apparatus. The method is specific for the specified  
CC serotype to the exclusion of all other bacteria, including other  
CC serotypes of E. coli.  
XX  
XX  
SQ Sequence 23 BP; 5 A; 6 C; 4 G; 8 T; 0 other;  
  
Query Match                    56.0%; Score 14; DB 18; Length 23;  
Best Local Similarity       77.3%; Pred. No. 1.5e+03;  
Matches 17; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
  
OY 2 ctgcactgcatcctctt 23  
      ||| |||| | | | | | |  
DB 1 ctcaatctgagagccgctactt 22  
  
RESULT 8  
AAO38554/C  
ID AAO38554 standard; DNA: 30 BP.  
XX  
XX AAO38554;  
XX  
XX 16-JUL-1993 (first entry)  
XX  
XX T cell receptor PCR primer Vbeta15.  
XX  
XX  
XX Rheumatoid arthritis; synovial; therapy; therapeutic;  
XX autoimmune response; variable region; mammal; immunisation;  
XX polymerase chain reaction; ss.  
XX  
XX Synthetic.  
XX  
XX W09304695-A.  
XX  
XX 18-MAR-1993.  
XX  
XX 27-AUG-1992; 92WO-US07289.  
XX  
XX 28-AUG-1991; 91US-0750913.  
XX  
XX 06-JAN-1992; 92US-0817912.  
XX  
XX (UYPE-) UNIV PENNSYLVANIA.  
XX (WIST-) WISTAR INST.  
XX  
XX Weiner DB, Williams WV;  
XX  
XX WPI; 1993-100655/12.  
XX  
XX T-cell receptor based treatment of rheumatoid arthritis - comprises  
XX administration of antibodies to T-cell receptor variable regions  
XX  
XX Disclosure; Fig 5; 110pp; English.  
XX  
XX The sequence is that of a human T cell receptor PCR primer, Vbeta15  
XX which was used to amplify T cell receptor transcripts from cDNA  
XX derived from rheumatoid synovial cell lines. It was used in  
XX combination with the middle constant region primer (Cbeta-mld).  
XX  
XX  
SQ Sequence 30 BP; 13 A; 3 C; 8 G; 6 T; 0 other;  
  
Query Match                    56.0%; Score 14; DB 14; Length 30;  
Best Local Similarity       77.3%; Pred. No. 1.6e+03;  
Matches 17; Conservative 0; Mismatches 5; Indels 0; Gaps 0;





CC The present invention relates to the diagnosis of a pathophysiological  
CC subtype of psychotic, mood or personality disorders or detecting a  
CC person at increased risk of developing such disorders. The process  
CC involves obtaining sample from the person and detecting a sequence  
CC alteration in the phenylalanine hydroxylase (PAH) gene. Specifically,  
CC the invention involves detection of a K274E mutation or an L321L  
CC polymorphism. A composition of branched chain amino acids or aromatic  
CC amino acids and normal PAH DNA is used for treating a person diagnosed  
CC of having psychotic disorders or for preventing the development of such  
CC disorders in first or second degree relatives of the subject. The  
CC present sequence is a PCR primer used for amplification of part of the  
CC coding region of the PAH gene.  
CC  
SQ Sequence 60 BP; 1 A; 33 C; 14 G; 12 T; 0 other;

Query Match 55.2%; Score 13.8; DB 21; Length 60;  
Best Local Similarity 72.0%; Pred. No. 2.2e+03;  
Matches 18; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

OY 1 gctgatctgagatccctcttcgc 25  
11 11 111111 11 111 1111  
DB 36 gccgcgtcctgctcttccttcgc 60

## RESULT 14

AAA27817/c  
ID AAA27817 standard; DNA; 24 BP.

AC AAA27817;

DT 12-SEP-2000 (first entry)

DE North American PRRS virus ORP1a primer RACE3.

XX North American PRRS virus; Nidovirales virus; pig; swine; vaccine;

KW PCR primer; RACE; ss.

OS North American porcine reproductive and respiratory syndrome virus.

XX EP1018557-A2.

PN 12-JUL-2000.

PD 25-NOV-1999; 99EP-0309409.

PR 22-DEC-1998; 98US-0113345.

XX (PFIZ ) PRIZER PROD INC.

PA Calvert JG, Welch SM, Sheppard MG;

XX WPI: 2000-444364/39.

DR The present sequence is that of primer RACE3, complementary to  
XX nucleotides 1733-1756 in the ORF1a gene of North American porcine  
XX reproductive and respiratory syndrome (PRRS) virus P129A. It was  
XX used in a 5' RACE to determine the extreme 5' end of the P129A  
XX genome. cDNA corresponding to the North American PRRS virus genome  
XX is given in AAA27809. The invention relates to polynucleotide  
XX molecules, plasmids, viral vectors and transduced host cells that  
XX comprise this DNA. It also relates to polynucleotide molecules,  
XX viral vectors and transduced host cells encoding a genetically  
XX modified North American PRRS virus that is disabled in its ability  
XX to cause PRRS, or which encodes 1 or more heterologous antigenic  
XX epitopes, for use as a vaccine.

XX Sequence 24 BP; 8 A; 3 C; 11 G; 2 T; 0 other;

Query Match 53.6%; Score 13.4; DB 21; Length 24;  
Best Local Similarity 93.3%; Pred. No. 2.9e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 11 tgatccctcttcgc 25  
11 111111111111  
DB 22 TGACCCCTTCTTGC 8

## RESULT 15

AAA37454  
ID AAA37454 standard; DNA; 30 BP.

AC AAA37454;

DT 15-AUG-2000 (first entry)

DE Arabidopsis acyltransferase ATAF5 5' RACE PCR primer, SEQ ID NO:143.

XX Acyltransferase; lipid synthesis; recombinant expression;

KW membrane fluidity; cold resistance; transgenic plant;

XX rapid amplification of cDNA ends; RACE PCR primer; ss.

OS Arabidopsis thaliana.

XX WO200018889-A2.

PN 06-APR-2000.

XX 24-SEP-1999; 99WO-US22231.

PR 25-SEP-1998; 98US-0101939.

XX (CALJ ) CALGENE LLC.

PA Lassner WM, Emig RA, Ruezinsky DM, Van Eenennaam A;

XX WPI: 2000-303447/26.

DR Novel acyltransferase related proteins useful for altering membrane  
XX fluidity in plant cells e.g. to induce chill tolerance  
XX  
XX Example 5; Page 27; 126pp; English.

XX The invention relates to nucleic acids encoding novel plant  
XX acyltransferase-like proteins (AAA37343-A37445) which comprise one of 8  
XX conserved acyltransferase motifs (AA199474-199481). Acyltransferases  
XX catalyse the transfer of acyl groups from a donor to a variety of  
XX substrates such as glycerides, sterols, stanols and phosphatides.  
XX Such enzymes play a key role in lipid synthesis, and thereby affect the  
XX characteristics of the plant. For example, cold-hardened plants have  
XX different lipid concentrations in the cell membrane compared to  
XX non-hardened plants, which makes the membrane more fluid and the plant  
XX more tolerant of low temperatures. The nucleic acid sequences of the  
XX invention can be used as probes or for expressing acyltransferase-like  
XX proteins in host cells e.g., for recombinant protein production. They  
XX may be expressed in plant cells to alter the lipid composition of the  
XX plant e.g., for the production of chill-resistant plants, or for altering  
XX the composition of plant oils. Sequences AAA37446-A37471 represent RACE  
XX (rapid amplification of cDNA ends) PCR primers used in an  
XX exemplification of the invention to generate Arabidopsis thaliana  
XX acyltransferase cDNA clones comprising the entire coding sequence.  
SQ Sequence 30 BP; 6 A; 4 C; 11 G; 9 T; 0 other;

Query Match 53.6%; Score 13.4; DB 21; Length 30;  
Best Local Similarity 73.9%; Pred. No. 3e+03;  
Matches 17; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 3 tcgactctgcatccctcttgc 25  
|||||  
Db 1 tcgagctgtgcatcgalgttgc 23

Search completed: March 9, 2002, 01:07:05  
Job time: 11951 sec